



C.W. Peale, Pinx.

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DAVID RITTENHOUSE, L.L.D. F.R.S.

President of the American Philosophical Society

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26, 1835



OR GEMS OF
LITERATURE, WIT AND SENTIMENT.

"What involution! what extent! what swarms
Of worlds, that laugh at earth! immensely great!
Immensely distant from each other's spheres;
What then, the wondrous space thro' which they roll,
At once it quite ingulphs all human thought;
'Tis comprehension's absolute defeat."

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DAVID RITTENHOUSE.

This distinguished astronomer, justly the pride of his native State, was born near Germantown, in the vicinity of this city, on the 8th of April, 1732. In his early years he was employed on his father's farm, yet even there his peculiar genius manifested itself. His younger brother used to say, that while David was employed in the fields, he repeatedly observed the fences, and even the plough with which he had been working, marked over with mathematical figures. The construction of a wooden clock exhibited the first evidence of his mechanical talents. He was then but seventeen years of age, and had never received any instructions, either in mathematics or mechanics. The delicacy of his constitution, and the irresistible bent of his genius, soon after induced his parents to allow of his giving up his farm, and to procure for him the tools of a clock and mathematical instrument maker.

From the age of eighteen to twenty-five, he applied himself with the greatest assiduity, both to his trade and to his studies. Engaged throughout the day in the former, it was only the time commonly assigned to rest, or, to use his own expression, his *idle hours*, that he could devote to the latter. Yet, with so little time at his command, with but two or three books, and without the least instruction, he acquired so considerable a knowledge of the mathematical sciences, as to be able to read the *Principia* of Newton. It is even asserted, that he discovered the method of fluxions, and that he did not know, until some years afterwards, that Newton and Leibnitz had contested the honour of an invention of which he deemed himself the author. It was during this double employment of his time in labour and in study, that Mr. Rittenhouse planned and executed an instrument, in which his mathematical knowledge, and his mechanical skill, were equally required. This instrument was the *orrery*. Machines, intended to give to the student of astronomy a general conception of the relative motions of the heavenly bodies, had been

constructed before; but the object of Mr. Rittenhouse was, to construct an instrument, by means of which he could exhibit, with accuracy, the positions of the planets and their satellites at any given period of the world, past, present, or future. It was, in fact, to make a kind of perpetual astronomical almanac, in which the results, instead of being given in tables, were to be actually exhibited to the eye. In this attempt he succeeded. Two of these orreries were made by his own hands. One belongs to the university of Pennsylvania; the other to the college of Princeton.

In 1769, Mr. Rittenhouse was named one of the committee, appointed by the American Philosophical Society, to observe the transit of Venus over the sun's disk, which happened June 3 of that year. A temporary observatory was directed to be built for the purpose, near his residence. In silence, and trembling anxiety, Mr. Rittenhouse and his friends waited for the predicted moment of observation; it came, and brought with it all that had been wished for and expected by those who saw it. In our philosopher, it excited, in the instant of one of the contacts of the planet with the sun, an emotion of delight so exquisite and powerful as to induce fainting. The reputation which Mr. Rittenhouse had now so justly acquired, as an astronomer, attracted the attention of the government, and he was employed in several geodesic operations of great public importance. In 1779, he was appointed by the Legislature of Pennsylvania, one of the commissioners for adjusting a territorial dispute between that State and Virginia; and the success of this commission is ascribed, in a great degree, to his skill and prudence. In 1786, he was employed in fixing the northern line, which divides Pennsylvania from New York. In 1769, he was employed in settling the limits between New York and New Jersey; and, in 1787, he was called upon to assist in fixing a boundary line between the States of Massachusetts and New York.

Mr. Rittenhouse was elected a member of the American academy of arts and sciences, at Boston, in 1782, and of the Royal Society of London, in 1795. In 1791, he was chosen the successor of Dr. Franklin, in the presidency of the American Philosophical Society. All his philosophical communications were made through the medium of the transactions of this society, and the list of his papers, printed in the three first volumes, shows his zeal for science and the fertility of his genius. In 1777, Dr. Rittenhouse was appointed treasurer of Pennsylvania, in which office he continued until 1789. In 1792, he was appointed, by the general government, director of the mint of the United States. The mechanical skill of Dr. Rittenhouse rendered him a highly useful officer. In 1795, he was obliged to resign in consequence of the state of his health.—His constitution, naturally feeble, had been rendered still more so by sedentary labour and midnight studies, and on the 26th of June, 1796, he died. His last illness was short and painful, but his patience and benevolence did not forsake him. Upon being told that some of his friends had called at his door to inquire how he was, he asked why they were not invited into his chamber to see him. "Because," said his wife, "you are too weak to speak to them." "Yes," said he, "that is true, but still I could have pressed their hands." In private life, Dr. Rittenhouse exhibited all those mild and amiable virtues by which it is adorned. As a husband, a father, and a friend, he was a model of excellence. Immediately after his decease, the American Philosophical Society decreed him the honour of a public eulogium; and this duty was executed in the ablest manner by Dr. Rush. In 1813, a large volume of memoirs of his life was published by his relative, William Barton, Esq. of Lancaster, from which we derived the foregoing incidents.

Miss Catherine —'s Mistake.

The first love of my youthful heart,
How well his form I knew;
The form that I had watch'd so oft
On Sundays from our pew.

He ask'd to see my stern papa,
And high my hopes arose,
For something whispered me, he came
That morning to propose.

Papa was out, and fortune seemed
To smile upon my fate.
In granting thus, with one I loved,
The wish'd for *tete-a-tete*.

And then he spoke as lovers do,
With youthful fervor warm,
Repentently of errors past,
And talked about "reform."

"O! sir," I cried, "to your appeal
My heart its aid hath lent—
I'll speak this evening to papa,
And ask for his consent."

"Dear maid," the brute replied, "on you
My stay too much encroaches:
Do pray entreat him to consent
To vote for both the Roaches!"

THE SEIZURE

"Man, proud man!
Drest in a little

"Still evening" had come—
vernal day,—and the west
the effulgence of the setting sun,
the gorgeous company of pomp
whose drapery hung like a gauze
car—poured a flood of crimson
of the little parlour wherein sat
and her father—he with his
enamoured study on the glass
ated the opposite horizon with
glancing over the sheet of water
rapid touch with brilliant arabesques
—and she dividing her attention
and a cherub of a girl, nestled
ed kisses, cross words and broken
tions.

It was a soft and sympathetic
lay composed into peace, and
than poetical beauty. The spirit
on the wave—a tranquil glory
realms of ethereal space; and a dream
slept on earth, air and sky, as the
and love and loneliness. A hawk
stole from the scene into the
a prophetic fulness of thought
seemed to borrow from the
breathings of the vesper hour, a
of that perfect and perennial
by the vision of the New Jerusalem
foundations are of the crystal
and its luminary the immediate
sence of Jehovah himself. In
spirit soaring from our sublunary
sphere, expands with the sublimity
tion, and feels itself already
ty. In such an evening did Adam
and love amid the solitude and
in such an evening did the com
scend to salute her, who was "high
women," as the virgin-mother
such an evening, hovering over
John as in the seclusion of his
he mused and offered the living
an evening sacrifice," did the
mystic pen, which was to inscribe
burning marvels of the Apocalypse
woful and wayward destiny of
face of creation, with all its
fluences woos him to a sense of
cities and their developement in
beatitude, how seldom can he
the enjoyment of aspirations so
Cares, crime and casualties con
tract contemplation—and drag
mind to struggle with the pains
groveling—perchance guilty—
It was even thus with the little
duced to my readers; even there
the gifted and the beautiful—and
and sickening under the pressure
could no longer look upon and
a painter's eye and poet's glow
seemed to shed only gloom over
—and its once delightful dyes
own deceptive and disastrous
and daughter, as they took their
deep discourse—or rather she spoke
sively on one topic; while he
inattentive—and then to hearken